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10/578,326	05/04/2006	Jan Andrt	289136US6PCT	5761
22850	7590	12/14/2007		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER PATEL, VINOD D	
			ART UNIT	PAPER NUMBER
			3742	
			NOTIFICATION DATE	DELIVERY MODE
			12/14/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/578,326

Applicant(s)

ANDRT, JAN

Examiner

Vinod D. Patel

Art Unit

3742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 5/4/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: specification refers to claims, page 1, line 4, "....patent claim1, and page 3, lines 28-29, "...patent claim1." Claim 1 has been deleted by preliminary amendment. Since claim (s) may change, specification should not refer to claim (s).

Appropriate correction is required.

2. The abstract of the disclosure is objected to because abstract exceeds 150 words. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. Correction is required. See MPEP § 608.01(b).

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, one or more heating wire are cut through to produce one or more passive wires as claimed in claim 29, a the wires placed on mounting sheets in a helical shape as claimed in claim 30, wires are rippled with short waves and amplitudes as claimed in claim 31, antenna connecting point as claimed in claim 32, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate

prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 18- 26, 28, 32 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Marriot (US4119425).

Marriot discloses a heatable composite pane (10) comprising: a trapezoidal outline and a heating area embedded (During examination, claim limitations are to be given their broadest reasonable reading, embedded is considered as to be part of, imprinted is part of) in the composite and formed from heating wires (26) (During

examination, claim limitations are to be given their broadest reasonable reading, electrically conducting silver-glass frit lines (26) are considered as wires), which are laid alongside one another; at least two busbars (30), that connect ends of a number of heating wires to one another electrically in parallel and that are located opposite along side edges of the composite pane, which run parallel to one another, with at least one busbar (27) also extending along the side edge in an area of an outer triangular surface (13) of the trapezoidal outline, and wherein at least one outer triangular surface of the trapezoidal outline is also occupied by further heating wires (26) that can be fed electrically via busbars and that run essentially parallel to one another in main panel (12), and triangular (13) and to the heating wires (26) of the heating area, and with at least two groups of heating wires, which are electrically connected in series with one another (Fig. 3), also being provided, wherein, in the area of the at least one outer triangular surface (13), heating wires (26) which are located parallel alongside one another and have different lengths are combined to form groups connected in parallel, and wherein at least two of the groups are electrically connected to one another in series such that an effective wire length between the two main busbars is increased, to homogenize the heating power in the triangular surface with the heating power in the heating area.

Additional busbars are used as a connection between in each case two groups.

The additional busbars are arranged in parallel with the busbars.

The number of wires in the individual groups is the same.

Limbs of the two busbars also extend along at least one side edge in the area of the outer triangular surfaces of the trapezoidal outline, and end on both sides of a separation point.

External connections of the two busbars are arranged in an area of free ends of the limbs on both sides of a separation point.

The external connections of the at least two busbars are connected in a physically adjacent form close to a corner of the composite pane.

At least one of the busbars is subdivided into two electrically separate sections, each of which includes an external connection.

The side heating wires have an electrical resistance per unit length that differs from that of the heating wires in the central heating area.

The side heating wires have a lower resistance than the heating wires in the central heating area.

One or more of the busbars is provided with external connections at antenna connecting points.

A heatable composite pane (10) use in a vehicle (11) as its rear windshield as shown in the Figure 1.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marriot (US4119425) as applied to claims 1-26, 32 and 34 above, and further in view of admitted prior art GB 2 091 527.

Marriot disclose all the claimed limitations except one or more side heating wires are cut through to produce one or more passive wires that do not contribute to the heating power.

GB 2 091 527 discloses a heatable pane, in order to prevent over heating in the area of shorter heating conductors, some of the heating conductors are cut through.

It would have been obvious to one of ordinary skill in the art at the time of invention to cut one or more heating wires in order to prevent over heating condition as taught by GB 2 091 527 for the device of Marriot.

8. Claims 27 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marriot (US4119425) in view of admitted prior art Shibata et al. (US5798499).

Marriot discloses all the claimed limitations except the side heating wires have a higher resistance than the heating wires in the central heating area, and the wires are rippled with short waves and amplitudes with respect to their longitudinal axis, which is essentially in a straight line.

Shibata discloses a electrically heating windshield glass having a substantially uniform thermal distribution, the diameter of the tungsten wire or space between adjacent wires is continuously and/or stepwisely changed in response to a change of the distance between the busbars (abstract), the wires are in sinusoidal waveform

having an amplitude of 0.2-1.5 mm and a wavelength of about 2-8 mm whereby heat can be uniformly generated in terms of either temperature or optics (column 4, lines 20-26).

It would have been obvious to provide the side heating wires having a higher resistance than the heating wires in the central heating area and wires having rippled with short waves and amplitudes with respect to their longitudinal axis, which is essentially in a straight line in order to have uniform thermal distribution as taught by Shibata et al. for the device of Marriot.

9. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marriot (US4119425) in view of Bethge et al. (US4284452).

Marriot discloses all the claimed limitations except the wires are placed on mounting sheets in a helical shape.

Bethge et al. discloses a method of embedding helical coil in heated panes to simplify manufacturing economical, efficient and better visibility (abstract).

It would have been obvious to provide the wires placed on mounting sheets in a helical shape in order to simplify manufacturing economical, efficient and better visibility as taught by Bethge et al. for the device of Marriot.

10. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marriot (US4119425) in view of Gillery (US4820902).

Marriot discloses all the claimed limitations except an edge area provided with an opaque colored strip that optically coats the busbars.

Gillery discloses bus bar arrangement for an electrically heated transparency comprising opaque boarder (25) to conceal busbars of the heating circuit (column 3, lines 20-23).

It would have been obvious to provide an edge area with an opaque colored strip that optically coats the bus bars in order to conceal bus bars as taught by Gillery for the device of Marriot.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vinod D. Patel whose telephone number is 571-272-4785. The examiner can normally be reached on 7.15 A.M. TO 3.45 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu B. Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Vinod D. Patel
Examiner
Art Unit 3742

VP

A handwritten signature in black ink, appearing to read "Quang Van", with a stylized flourish at the end.

QUANG VAN
PRIMARY EXAMINEE